



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/065,807	11/21/2002	Shigefumi Odaohhara	JP920010333U	7978

25299 7590 11/04/2004

IBM CORPORATION
PO BOX 12195
DEPT 9CCA, BLDG 002
RESEARCH TRIANGLE PARK, NC 27709

EXAMINER

LUK, LAWRENCE W

ART UNIT PAPER NUMBER

2838

DATE MAILED: 11/04/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/065,807	Applicant(s) ODAOHHARA, SHIGEFUMI	
	Examiner Lawrence W Luk	Art Unit 2838	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
 - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
 - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
 - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 10 August 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-4, 16-18 and 22-26 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-4, 16-18 and 22-26 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-4, 16-18 and 22-26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Szepesi (5,672,952) in combination with Aker et al. (6,803,746).

As to claim 1, Szepesi disclose in figure 3A, apparatus comprising: a body which consumes power; a battery (unit 14) which supplies power to the body through a power line by discharging after being charged; a high-capacitor capacitor connected to the power line in parallel with the battery (unit 14); a switch (unit 10) for disconnecting or connecting the high-capacity capacitor from or to the power line by a circuit; and a controller (unit 23) for controlling operations of the switch (unit 10), except for a high-capacitor capacitor.

Aker et al. disclose in figure 10, column 4, lines 8-13, a high-capacitor capacitor connected to the power line in parallel with the battery.

It would have been obvious to person having ordinary skill in the art at the time of the invention was made to modify the device of Szepesi to include a high-capacitor capacitor connected to the power line as taught by Aker et al. for control the charge flowing through the power switch.

As to claim 2, Szepesi in view of Aker et al. are applied *supra*, and Szepesi further disclose in column 2, line 48 to column 3, line 5, the controller (unit 23) controls operations of the switch (unit 10) to disconnect the high-capacity capacitor by a circuit when the battery (unit 14) is disconnected from the body.

As to claim 3, Szepesi in view of Aker et al. are applied *supra*, and Szepesi further disclose in column 2, line 48 to column 3, line 5, the controller (unit 23) controls operations of the switch (unit 10) to disconnect the high-capacity capacitor by a circuit when the body is powered off and/or the body is kept in a small-power-consumption mode.

As to claims 4 and 26, Szepesi in view of Aker et al. are applied *supra*, and Szepesi further disclose in figure 3A, column 3, lines 6-11, wherein the high capacity capacitor and the switch are integrated so that they can be set to the body.

As to claim 16, Szepesi in view of Aker et al. are applied *supra*, and Szepesi further disclose in column 9, lines 50-61, an electrical apparatus comprising; a cell for supplying power through a predetermined power line; and a high-capacity capacitor connected to the power line in parallel with the cell (unit 14) under a predetermined condition.

As to claim 17, Szepesi in view of Aker et al. are applied *supra*, and Szepesi further disclose in figure 3A, a switch (unit 10) for disconnecting or connecting the high-capacity capacitor from or to the power line by a circuit; and a CPU (unit 23) for controlling operations of the switch (unit 10).

As to claim 18, Szepesi in view of Aker et al. are applied *aupra*, and Szepesi further disclose in figure 3A, column 5, lines 10-25, the CPU detects a state in which the cell is not connected to the electrical apparatus or a state in which it is unnecessary to supply a peak power to the electrical apparatus when the cell is set to the electrical apparatus and controls operations of the switch based on a detected state.

As to claim 22, Szepesi in view of Aker et al. are applied *aupra*, and Szepesi further disclose in figure 3A, column 5, lines 10-25, an electrical apparatus comprising: a cell for supplying power through a predetermined power line; a high capacity capacitor connected to the power line in parallel with the cell under a predetermined condition; a switch for disconnecting or connecting the high-capacity capacitor from or to the power line by a circuit; and a CPU for controlling operations of the switch; wherein the CPU detects a state in which the cell is not connected to the electrical apparatus or a state in which it is unnecessary to supply a peak power to the electrical apparatus when the cell is set to the electrical apparatus and controls operations of the switch based on a detected state.

As to claim 23, Szepesi in view of Aker et al. are applied *aupra*, and Szepesi further disclose in figure 3A, apparatus comprising: a body which consumes power; a battery (unit 14) which supplies power to the body through a power line by discharging after being charged; a switch (unit 10); a high-capacity capacitor coupled in series with said switch (unit 10) to the power line, the series combination of said switch (unit 10) and said high-capacity capacitor being coupled in parallel with the battery (unit 14); wherein the switch couples and decouples said high-capacity capacitor from and to the

power line, and a controller (unit 23) for controlling operations of the switch (unit 10) and which acts to conditionally decouple the high-capacity capacitor from the power line.

As to claim 24, Szepesi in view of Aker et al. are applied *aupra*, and Szepesi further disclose in column 2, line 48 to column 3, line 5, wherein the controller (unit 23) controls operations of the switch (unit 10) to decouple the high-capacity capacitor in response to the battery being disconnected from the body.

As to claim 25, Szepesi in view of Aker et al. are applied *aupra*, and Szepesi further disclose in column 2, line 48 to column 3, line 5, wherein the controller (unit 23) controls operations of the switch (unit 10) to decouple the high-capacity capacitor by a circuit in response to a reduced power state selected from the group consisting of a state in which the battery is powered off and a state in which the body is kept in a low-power-consumption mode.

Conclusion

3. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lawrence W Luk whose telephone number is (571)272-2080. The examiner can normally be reached on 7 a.m. to 5 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Sherry can be reached on (571)272-2084. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

LWL
October 28, 2004

Lawrence Auk
examiner
10/28/04